

## ABSTRACT OF THE DISCLOSURE

- The present invention is directed to an improved system and method in which a pen-sized and shaped device detects, recognizes and stores handwriting as it is written by the device. The invention employs both an active feedback network
- 5 and a character recognition methodology of partitioning detected input into character components. The active feedback network continually monitors device output to determine the sufficiency of the data input. If the data input is insufficient, the device modifies its detection methodology to obtain data the device readily recognizes. Data recognition is performed in multiple asynchronous processes.
- 10 Elements of individual characters are sampled by the detector. Character elements are processed and recognized on this elemental level. Recognized character elements are stored for subsequent assembly and recognition on a character level. Thus, preferably two recognition sub-processes take place, one on a character element level and another on a character level.